

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,326	10/15/2004	Kouji Ishida	Q84036	6667
23373 73	590 10/18/2005		EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W.		ı w	CHEUNG, WILLIAM K	
SUITE 800	LVANIA AVENUE, I	4. <b>V</b> .	ART UNIT	PAPER NUMBER
WASHINGTO	N, DC 20037		1713	

**DATE MAILED: 10/18/2005** 

Please find below and/or attached an Office communication concerning this application or proceeding.

i			
	Application No.	Applicant(s)	$\overline{}$
	10/511,326	ISHIDA ET AL.	`
Office Action Summary	Examiner	Art Unit	
	William K. Cheung	1713	
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC .136(a). In no event, however, may a rod d will apply and will expire SIX (6) MON tte, cause the application to become AB	CATION.  Poply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 31.	<u>August 2005</u> .		•
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	is action is non-final.		
3) Since this application is in condition for allow	ance except for formal matt	ers, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-4,6 and 8</u> is/are pending in the ap	plication.		
4a) Of the above claim(s) 1-4 and 8 is/are with			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>6</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examir	ner.		
10) The drawing(s) filed on is/are: a) □ ac	ccepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the corre		, ,	
11) ☐ The oath or declaration is objected to by the E	Examiner. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).	
1. Certified copies of the priority documer	nts have been received.	·	
2. Certified copies of the priority documer		· · · · · · · · · · · · · · · · · · ·	
3. Copies of the certified copies of the pri		received in this National Stage	
application from the International Bures * See the attached detailed Office action for a lis	• • • • • • • • • • • • • • • • • • • •	ropolyad	
See the attached detailed Office action for a lis	st of the certified copies flot	eceiveu.	
Attachment(s)	_		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)		ummary (PTO-413) )/Mail Date	
<ul> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> <li>Paper No(s)/Mail Date</li> </ul>	_	formal Patent Application (PTO-152)	

Application/Control Number: 10/511,326 Page 2

Art Unit: 1713

## **DETAILED ACTION**

1. In view of amendment filed August 31, 2005, claims 5, 7 have been cancelled. Claims 1-4, 6, 8 are pending.

- 2. In view of amendment filed August 31, 2005, the objection of claim 1-5, and 8 is withdrawn.
- 3. Newly amended claims 1-4, and 8 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The original elected claims are directed to an inner liner comprising a rubber composition which is different from the non-elected invention of claims 1-4, 8 which is drawn to a tire. Both are patentably distinct from each other because they possess different mode of operations and operational functions.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-4, 8 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim 6 is examined with merit.

Application/Control Number: 10/511,326 Page 3

**Art Unit: 1713** 

## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klemmensen et al. (U.S. Patent No. 5,005,625) in view of Ajbani et al. (U.S. Pub. No. 2003/0004250 A1, U.S. Patent No. 6,721,311).

The prior art to Klemmensen et al. discloses a pneumatic rubber tire having an integral inner liner of a sulfur cured rubber composition comprised of an acrylonitrile/diene copolymer rubber with specified  $T_g$  range and at least one designated additional rubber having a  $T_g$  of a specified range (Abstract). The specific  $T_g$  range of -

Application/Control Number: 10/511,326

Art Unit: 1713

40° C to -105° C for a rubber component including styrene-butadiene copolymer rubber is taught at column 5, line 52-57.

The difference between the prior art and the present application is that Klemmensen et al. are silent that a composition comprising an organized lamellar clay mineral.

The prior art to Ajbani et al. is adequately presented in paragraph 4 previously in this Office Action and is incorporated herein by reference. Ajbani et al. disclose that the clays used in the invention are layered silicate clays of the smectite, vermiculite and mica families and do not include clays that do not have any appreciable swelling potential [0052]. The layered silicate clay being chemically modified by surfactants such as dimethyl dehydrogenated tallow ammonium salt and the benefit of such clay modification, i.e. making it compatible with organic compositions and in general allowing it to provide rheological modification in select organic fluids, can also be seen at [0052]. In view of the disclosure of Ajbani et al., the examiner has a reasonable basis that the claimed "organized lamellar clay mineral is inherently possessed in Aibani et al.

Further, in light of Ajbani et als' teaching as discussed above, one having ordinary skill in the art at the time the invention was made would have appreciated the benefit of using an organically modified layered clay, such as an organically modified mica, and use it in Klemmensen et als' rubber composition, thus to arrive the instant

Art Unit: 1713

claim motivated by a reasonable expectation of successfully obtaining the composition of claim 6.

## Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571)

Application/Control Number: 10/511,326 Page 6

Art Unit: 1713

272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to

2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William K. Cheung

Primary Examiner

October 14, 2005